ABSTRACT

In a touch-mode capacitance type pressure sensor, a quartz pressure sensor that can solve difficulty in thickness control on a diaphragm due to a low etching precision which is a drawback in a pressure sensor using a detecting piece made from silicon, and deterioration in a detecting accuracy and poor repetitive reproducibility in elastic deformation due to the difficulty, respectively, is provided by utilizing quartz as a detecting piece for the pressure sensor. The quartz pressure sensor including a bottom plate made from an insulating material, a lower electrode film and a dielectric film sequentially laminated on a face of the bottom plate, a detecting piece provided at a position thereof opposed to said dielectric film with a thin portion and fixed on the face of the bottom plate, and an upper electrode film formed in at least one portion of the thin portion having a positional relationship thereof opposed to the lower electrode film, in which a fine gap airtight space is provided between a lower face of the detecting piece and the dielectric film is characterized in that the detecting piece is made from a quartz material.